



Watershed Watch Network

Office of Outreach and Education
Division of Watershed Management
NJDEP

Watershed Watch Network

Mission Statement:

“To foster and develop a sense of stewardship toward local waters that serves to remind or give warning of the health of the watershed.”

Watershed Watch Network

Goals

- Recruit and train citizens to become stewards of a local waterway
- Offer a program that provides a range of rigor so that virtually everyone can participate at some level.
- Generate a web-based database of information that can be used by citizens and DEP.

Watershed Watch Network, cont.

- Coordinate Annual Monitoring Summits to report out data and recognize the work of volunteers
- Provide monitoring updates and information through *Watershed Focus* newsletter & via email

A photograph of a stream with people monitoring water quality. In the foreground, a person in a grey jacket is crouched on the grassy bank, looking down at the water. In the background, another person is standing in the stream, possibly taking a sample. The water is clear and flowing, surrounded by green grass and trees.

Watershed Watch Network, cont.

- Create a guidance manual for monitors
- Establish stream reach Id numbers using a consistent numbering system
- Establish Internal Advisory Group
- External Volunteer Monitoring Advisory Group

Watershed Watch Network, cont.

- Official recognition/registration of volunteer monitoring programs that complete a DEP training course and submit a QA/QC protocol that is approved by DEP



The New Approach

- Allows for volunteers to pick their level of monitoring involvement based on:
 - Purpose for monitoring
 - Intended data use
 - Intended data users

Options for Involvement

- Purpose A: Environmental Education
- Purpose B: Stewardship
- Purpose C: Community Assessment
- Purpose D: Indicators



Tier A: Environmental Education

Data Users

- Participants
- Students
- Watershed residents

Data Use

- Promote stewardship
- Raise their level of understanding of watershed ecology

Quality Needed

- Low level of rigor, but use sound science
- Wide variety of study designs are acceptable
- Quality assurance (QA) optional

The background of the slide is a photograph of several people in a field, possibly engaged in a community activity or a field study. The image is slightly blurred and has a warm, golden-hour lighting. The people are wearing casual clothing, and some are holding what appear to be bags or containers. The overall scene suggests a collaborative, outdoor environment.

Tier B: Stewardship

Data User

- Participants
- Watershed residents
- Landowners
- Local decision makers (optional)

Data Use

- Gain understanding of existing conditions and how any changes over time
- Screen for and identify problems and positive attributes

Quality Needed

- Low to medium rigor
- Variety of study designs is acceptable
- QAPP desirable

Tier C: Community and/or Watershed Level Assessment

Quality Needed

Data Users

- Local decision-makers
- Watershed association
- Environmental organizations
- Possibly DEP

Data Use

- Assess current conditions
- Track trends
- Source track down of Nonpoint source pollution

- Medium level of rigor
- Data needs to reliably detect changes over time and space
- Study design is focused on pollution sources
- QAPP required

Tier D: Indicators (visual and biological assessments, and water quality)

Data Users

- NJDEP
- Local decision-makers
- Watershed associations
- Environmental organizations

Data Use

- Assess current conditions and impairments
- Supplement agency data collection
- Research
- Evaluate best management practices (BMP) measures

Quality Needed

- Medium to high level of rigor
- Study design and methods need to be equivalent and recognized by agencies using data
- Training required
- QAPP required

Potential Uses for Watershed Watch Volunteer Data

- Education
- Problem Identification
- Local Decisions
- Research
- NPS Assessment
- Watershed Planning/Open Space acquisition
- Identification of “action now” projects
- Monitoring the success/failure of restoration projects

Who Will Use the Data in the NJDEP?

- Watershed Area Managers
- Water Assessment Team
- Modeling Team
- NPS Program
- 319 Program
- TMDL Program
- Other Programs or Divisions within the DEP which need supplemental data

Addressing Data Quality Issues

- The Program or Division will need to review and approve the QAPP of the monitoring group
- The Water Quality Collection Methods will be checked and audited by the Office of Quality Assurance and the volunteer coordinator
- The program will continue to work closely with Fresh Water and Biological Monitoring

Addressing Data Quality Issues (cont.)

- The volunteer coordinator will work closely with the volunteers to insure data quality
- Trainings and recertification trainings will be offered annually
- QAPPs will be updated and modified as needed

What's Been going On?

- Internal Advisory Committee
- External Advisory Committee
- Protocol Assessment
- QAPP Collection & Assessment
- Survey
- Volunteer Monitoring Summit
- Monitoring Manual

Internal Advisory Committee

- Fresh Water and Biological Monitoring
- Division of Science and Research
- Division of Watershed Mgt & each Program within the Division
- Office of Quality Assurance
- EPA Region 2, Volunteer Coordinator and Quality Assurance office

External Advisory Committee

- NGO, Volunteer Monitoring Coordinators
- Volunteers (paid and unpaid)
- EPA Region 2
- Office of Quality Assurance
- Bureau of Fresh Water and Biological Monitoring
- Meadowlands Environmental Research Ins.
- Rutgers Co-op Extension
- Delaware River Basis Commission
- Others as needed

The Future

- Annual Volunteer Monitoring Summit
- Training certifications and recertification for volunteers
- Close working relationship with current monitoring groups
- Working with NJ's universities to aid in lab analysis of collected samples
- Coordination among NJDEP data users and the Network